



MINI PROJECT
REPORT ON
LEARNER LICENCE TEST

Submitted By
SONAL SHARMA (21169)
ASJAD KHAN (21093)
SNEHAL ZANJURNE (21205)
VENKATESH PENSALWAR (21152)
VIDESH BATOLE (21016)

Under the Guidance of
DR. ASHWYN KUMAR

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LEARNER LICENCE TEST

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Introduction

License test is a website based solution for those who wanted to practice questions and sign before going to give learning license test

Driving has become a skill that practically everyone has already acquired or wishes to acquire when they become of legal age. In India, the legal age to drive a vehicle depends on the type of vehicle you wish to drive. We already know that you have to have a valid driving license to legally drive in India. However, before you can even apply for a driving license, you have to apply for and acquire a learning license. Applicants who wish to get their driving license must first have their learning license which also allows them to practice driving while in the company of a person holding a permanent driving license. The Motor Vehicles Act of 1988 has made it mandatory for everyone to first have a learner's license before they can apply for a driving license.

A learning license test in Maharashtra is conducted to test an applicant's knowledge about traffic rules and regulations. The test is conducted as per the provisions of the Motor Vehicles Act, 1988 to judge an applicant's knowledge of traffic rules, regulations and road safety. The driving test in Maharashtra is conducted online in a questionnaire form for which the applicant has to give at least 60% of correct answers to obtain the LL. The learning license test slot can be booked online through

<https://parivahan.gov.in/>. The applicant has to visit the RTO to give the test. If the applicant passes the test, the learning license is delivered to his doorstep. On failing the test, the applicant can apply for it after a week. Further, an applicant can make an application for a permanent DL after 30 days or within 180 days from the date of issuance of the learning license.

You might have a question about how License test makes it easy? The Process of learning license test is you have to solve 15 questions out of 15 you have to score 8 marks to appear learning license test

Now there is no books or resources to practice question and signs so we provide same environment to practice those questions on our platform you can practice questions and then check your knowledge about it by giving exam. now you can analyze your progress so before sitting for the exam you have solved enough questions to clear learning license exam test.

Aims and Objective

The main objective of this website is we wanted to help people who are finding resources to learn and practice learning license test questions. We have seen there are fewer resources to learn some only provide questions and answers but they don't provide anything to practice it

1. Learn questions and signs :
2. Practice questions:
3. Track progress
4. Everything at one place
5. User-friendly UI

1. **Learn questions and signs :**

we wanted to provide a section where users can learn about questions and answers and also learn about traffic signs and their meaning

2. **Practice questions:**

Now we have identified the problem that where to test what we have learned and where we stand so we have provided a practice module

3. **Track progress:**

Now users need to know how many questions he/she has practiced and how many wrong, how many questions he/she has practice

4. **Everything at one place:**

Now we wanted users can learn and practice and check results at one place

5. **User-friendly UI:**

It is required to have a user-friendly UI so user can easily use websites

System Analysis

Identification of Need

- Now our system will overcome all drawbacks. In our system we are providing the Licence test to the persons by getting the users information and verifying the information.
- All work can be done in just a few clicks.
- The system helps to maintain all the user details and transaction details.
- To provide a user-friendly experience.

Scope of the Project

This website makes basic concepts clear about Learner Licence Test. It is a computer-based test that analyzes the knowledge of questions and road signs. Users have to familiarize themselves with these topics to give a learner's license test. Learners License Test can be used in private institutes as well as educational institutions. As it is a user-friendly web-based application it can be used anywhere.

Provide the information according of role: -

User: -

In the learner Licence test, the user can register with his/her first name, last name, email id, mobile no., date of birth, address etc. After registration the user will login after login the user can select the plan Basic, Standard, Premium. After selecting the plan, the user redirects to the payment page and the user can do the payment, after payment successfully the user can redirect to dashboard page in dashboard page the user can view practice page, test page and view profile page. practice the test of licence and the user can update his/her profile.

- **Register**
Users can register for the licence test with the required fields like first name, last name, date of birth, email id, mobile no., address, password and confirm password.
- **Login**
User can login with his/her email id and password. If user forget here password, then his/her can reset the password using here email id.
- **Forget Page**
If user forgot password and fails the login then he can reset the password using his/her email there will be one OTP which send on there Email Id. Using that OTP, the user can reset the password.
- **Plan Page**

User can make payment on his/her choice by selecting options of plans like basic, standard, premium.

- **Practice Test**

User can practice the test and also symbols of road signal using different languages like Marathi, Hindi, English.

- **Test**

User can give test for Learner licence test with different language like English, Marathi, Hindi.

- **Profile Page**

User can view his/ her profile and can update their profile like first name, last name, email id, mobile no., date of birth, address and password.

Admin: -

In the learner licence test, the admin can check all the details of users like user id, first name, last name, email id, plan etc. And the admin also checks the transaction details like transaction id, user id, plan, email.

- **Maintain Users Details**

Admin can view all the user's details like user id, first name, last name, email id, mobile no., address and plan.

- **Maintain Transaction Details**

Admin can view all the transaction's details like transaction id, user id, date, amount, email and mobile no. etc...

S/W & H/W Requirement Specification

Hardware Requirement Processor	Intel Core Duo 2.0 GHz or more
RAM	1 GB or More
Hard-disk	10GB or more
Monitor	15” CRT, or LCD monitor
Keyboard	Normal or Multimedia

Mouse	Compatible mouse Software
Language	Front end - HTML, CSS, JAVASCRIPT, Backend - JSP, DATABASE(MySQL).
Operation System	Windows 7, Windows 8 or above
Browser	Internet Explorer, Google Chrome, Firefox etc.

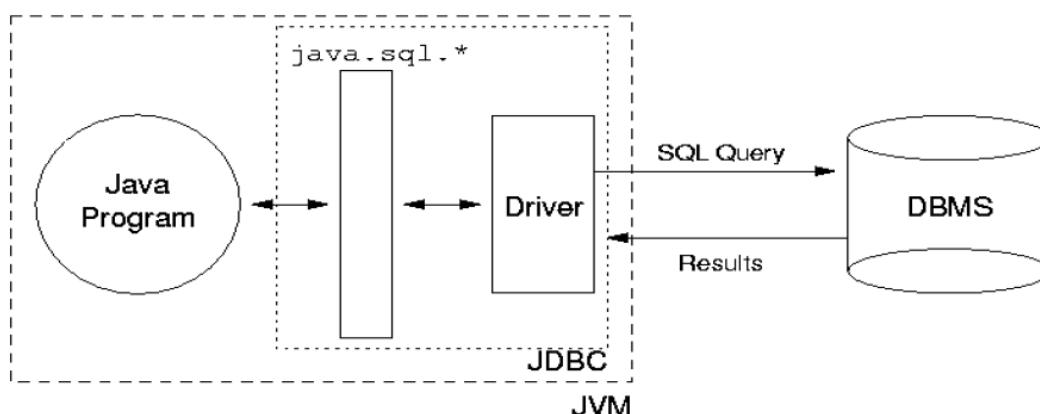
Detail Description of Technology Used:

Java: -

Java is a general-purpose, object-oriented programming language developed by Sun Microsystems of USA in 1991. Originally called Oak by James Gosling (one of the inventors of the language). Java was invented for the development of software for consumer electronic devices like TVs, testers, etc. The main aim had to make java simple, portable and reliable.

Java Authors: James, Arthur Van, and others. Java is a high-level, third generation programming language, like C, FORTRAN, Smalltalk, Perl, and many others. You can use Java to write computer applications that play games, store data or do any of the thousands of other things computer software can do. Compared to other programming languages, Java is most similar to C. However, although Java shares much of C's syntax, it is not C. Knowing how to program in C or, better yet, C++, will certainly help you to learn Java more quickly, but you don't need to know C to learn Java. A Java compiler won't compile C code, and most large C programs need to be changed substantially before they can become Java programs. What's most special about Java in relation to other programming languages is that it lets you write special programs called applets, web project etc. that can be downloaded from the Internet and played safely within a web browser. Java language is called as an Object-Oriented Programming language and before beginning for Java, we have to learn the concept of OOPs(Object-Oriented Programming).

JDBC DRIVER MODEL



Introduction to Tomcat web server

Tomcat is an open-source web server developed by Apache Group. Apache Tomcat is the servlet container that is used in the official Reference Implementation for the Java Servlet and Java Server Pages technologies. The Java Servlet and Java Server Pages specifications are developed by Sun under the Java Community Process. Web Servers like Apache Tomcat support only web components while an application server supports web components as well as business components (BEAs Web logic, is one of the popular application server). To develop a web application with jsp/servlet install any web server like JRun, Tomcat etc to run your application.

MySQL: -

MySQL is the world's most used open-source relational database management system (RDBMS) as of 2008 that runs as a server providing multi-user access to a number of databases. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open-source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open-source projects that require a full-featured database management system often use MySQL.

Proposed System

- In the proposed system all the parameter are considered to maintain neat and easier solution.
- User first has to register himself to practice license test.
- Admin has to maintain all the details of users and transactions.
- Admin prepare reports.
- In this system if user forgot here password, then he can reset the password.
- In this system the user can selects plans.
- In this system we are providing different language (i.e. English, Hindi, Marathi) tests for user.

Feasibility Study

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system.

Feasibility study is conducted once the problem is clearly understood. Feasibility is a high level capsule version of the entire system analysis and design process. The objective is to determine quickly at the minimum expense how to solve the problem. The purpose of feasibility is not to solve the problem but to determine if the problem is worth solving.

The system has been tested for feasibility in the following points.

1. Technical Feasibility
2. Economic Feasibility
3. Operational Feasibility

Technical Feasibility

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on outline design of system requirements in terms of input, processes, output, fields, programs and procedures. This can be qualified in terms of volume of data, trends, frequency of updating in order to give an introduction to the technical system.

Technical feasibility examines whether project is technically feasible or not. It checks whether current equipment's, technology, and people available are sufficient or not. If new technologies are needed, then how it can be done? Our project is technically feasible in all ways.

Technical feasibility study is always focuses on existing hardware and software. This also includes the need for more hardware and software and possibility of installing such a facility

Economic Feasibility

Establishing the cost-effectiveness of the proposed system i.e. if the benefits do not outweigh the costs then it is not worth going ahead. In the fast-paced world today there is a great need of online social networking facilities. Thus the benefits of this project in the current scenario make it economically feasible. The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide.

The economic feasibility considers the cost or benefits of proposed system. The benefits are always accepted to overcome waiting cost, development cost, investment cost, salaries and maintenance. While considering economic feasibility, it is checked points like performance, information and outputs from the system. The developing system must be justified by cost and benefit. Criteria to ensure that effort is concentrated on project, which will give best, return at earliest.

Operational Feasibility

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes. To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters as reliability, maintainability, support-ability, usability, productivity, advisability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviour are to be realized. A system design and development require appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantages of the opportunity identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. To ensure success. Desired operational outcomes must be imparted during design and development.

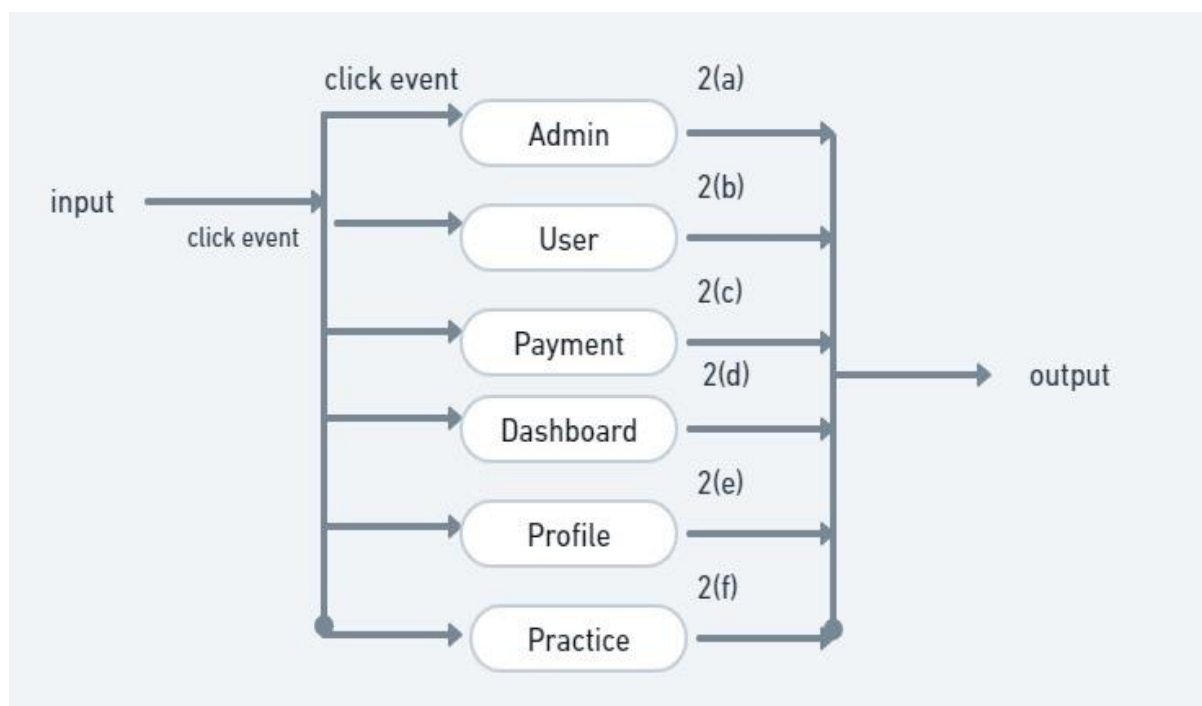
Diagrams

Data Flow Diagram

1. Zero level DFD(context level):-



2. First level DFD:-

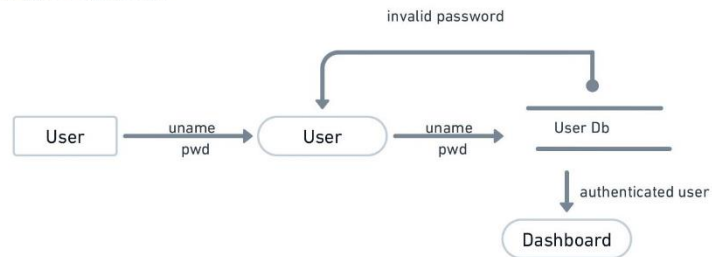


3. Second level DFD:

Level 2(a) :- Register



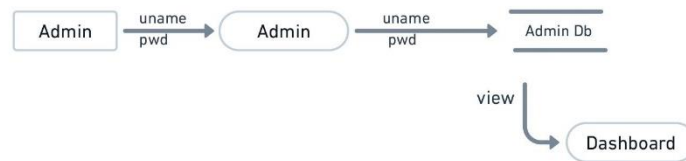
Level 2(b) :- Login(User)



Level 2(c) :- Payment



Level 2(d) :- Admin



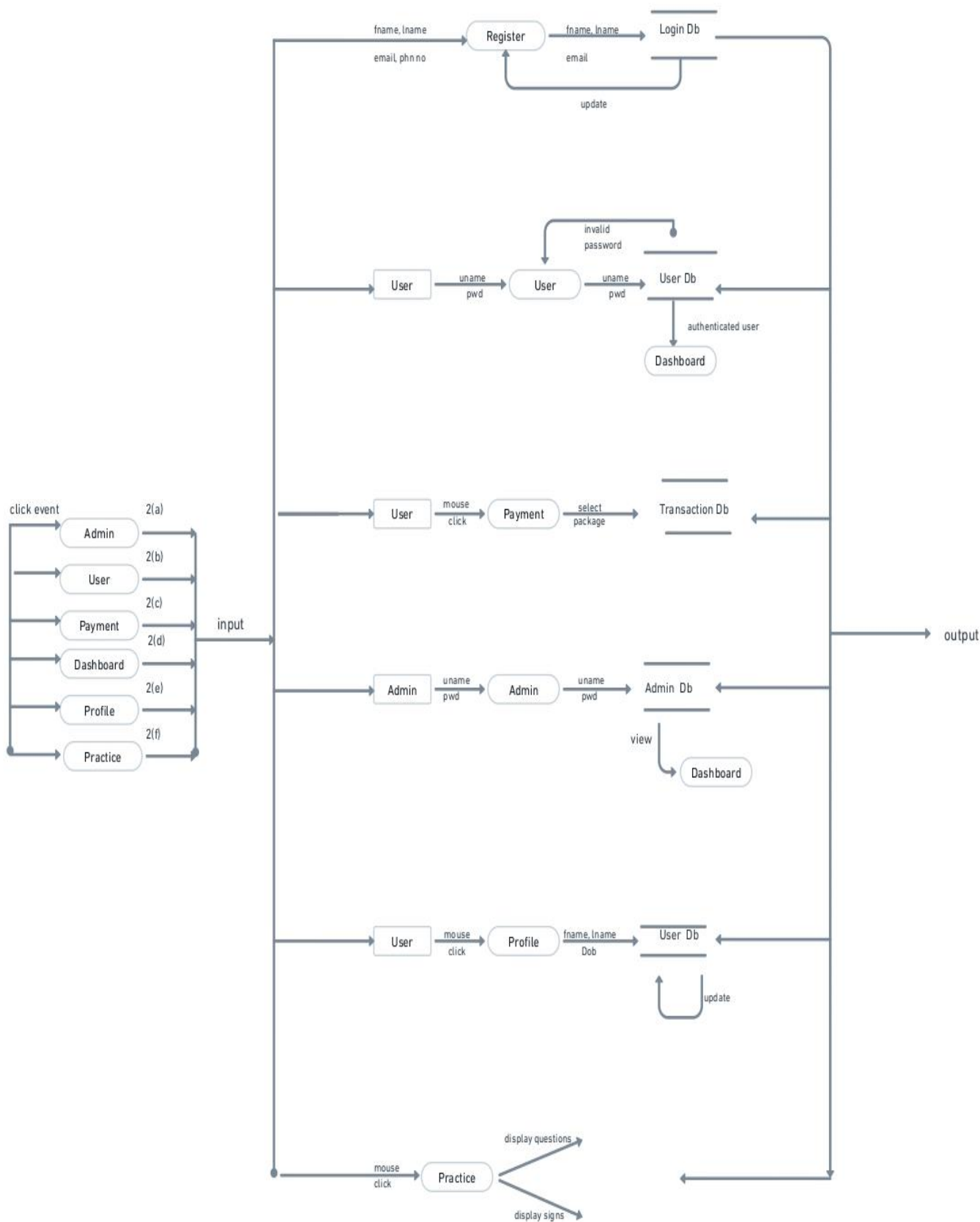
Level 2(e) :- Profile



Level 2(f) :- Practice

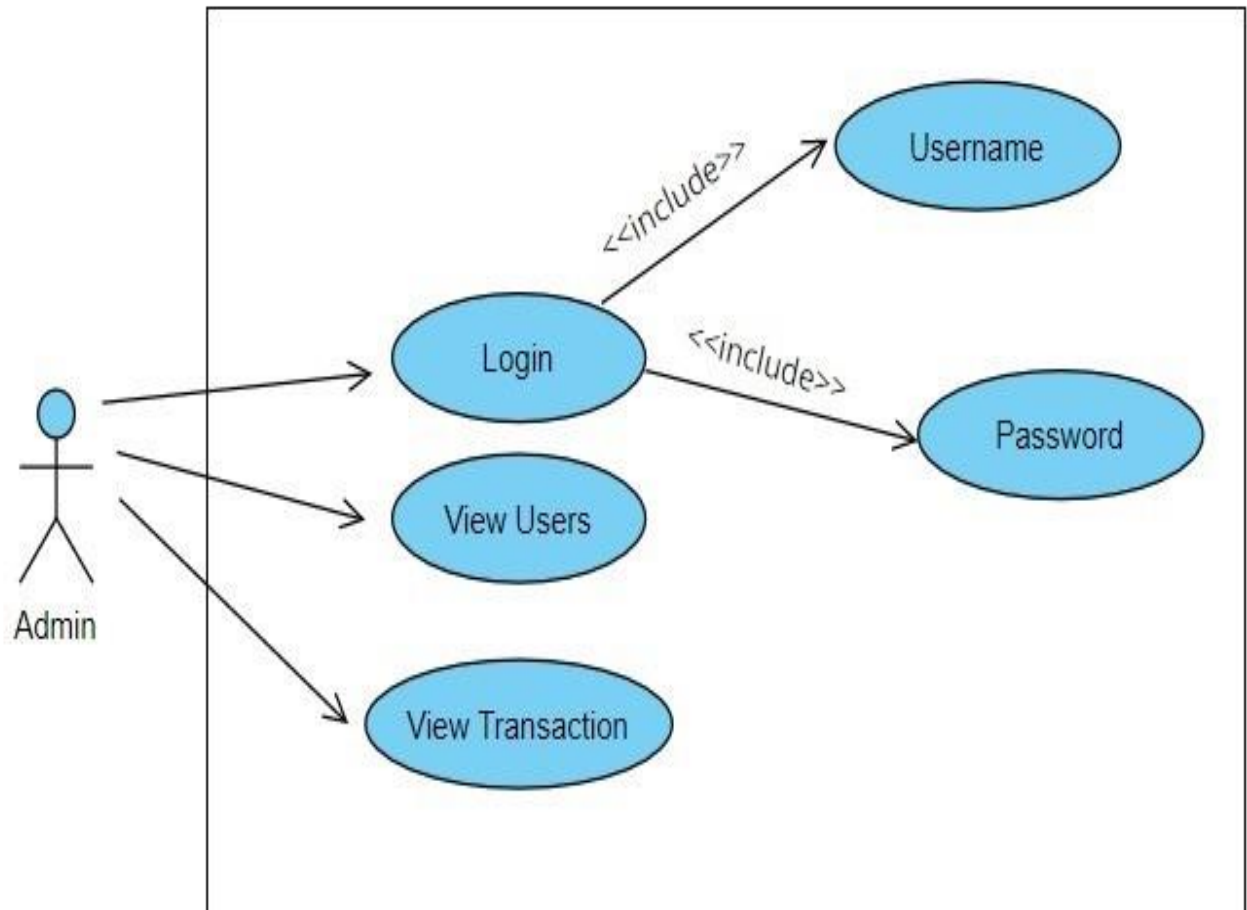


4. Third Level DFD:-

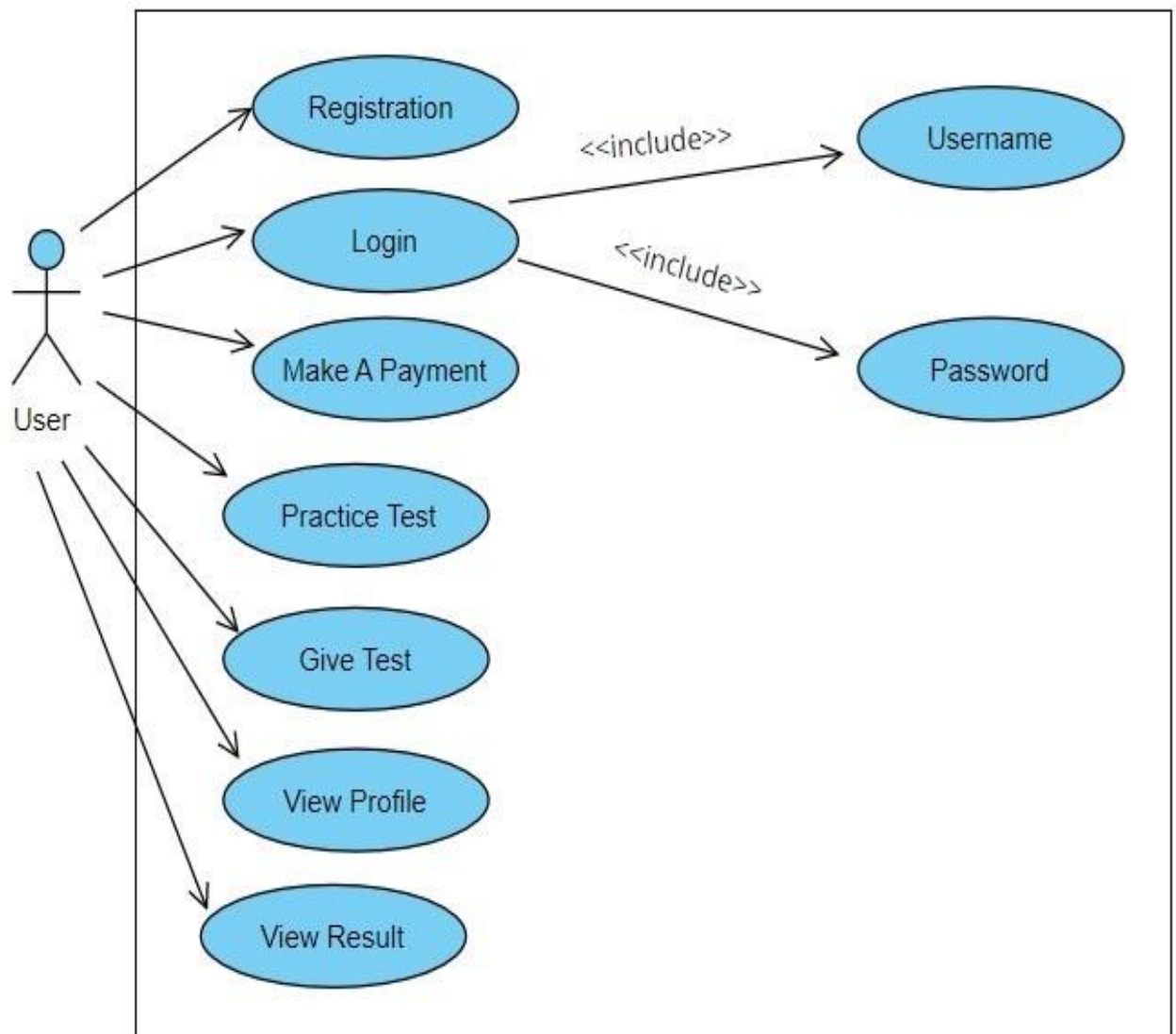


Use Case Diagram:-

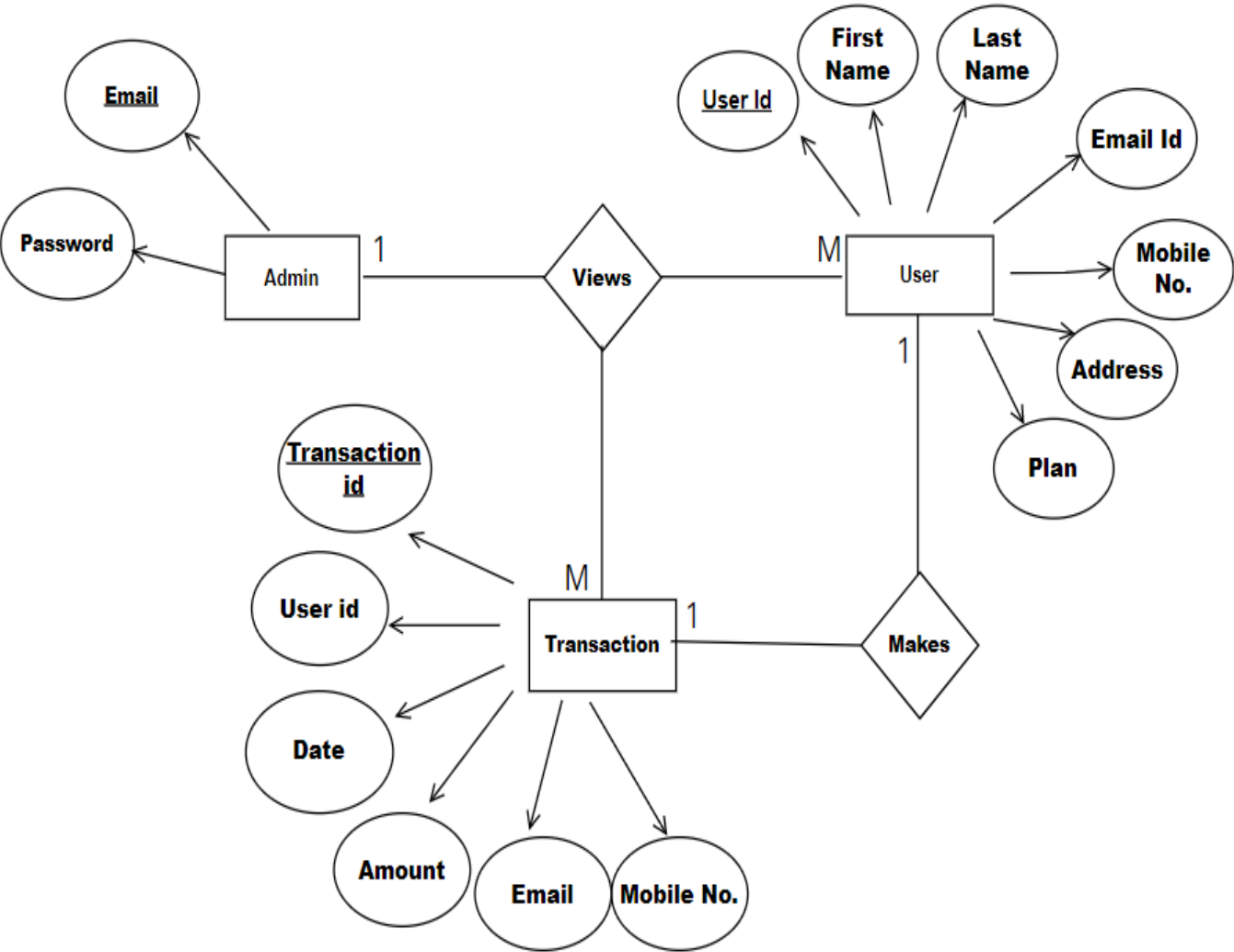
1. Use case diagram for Admin:-



2. Use case diagram for User:-

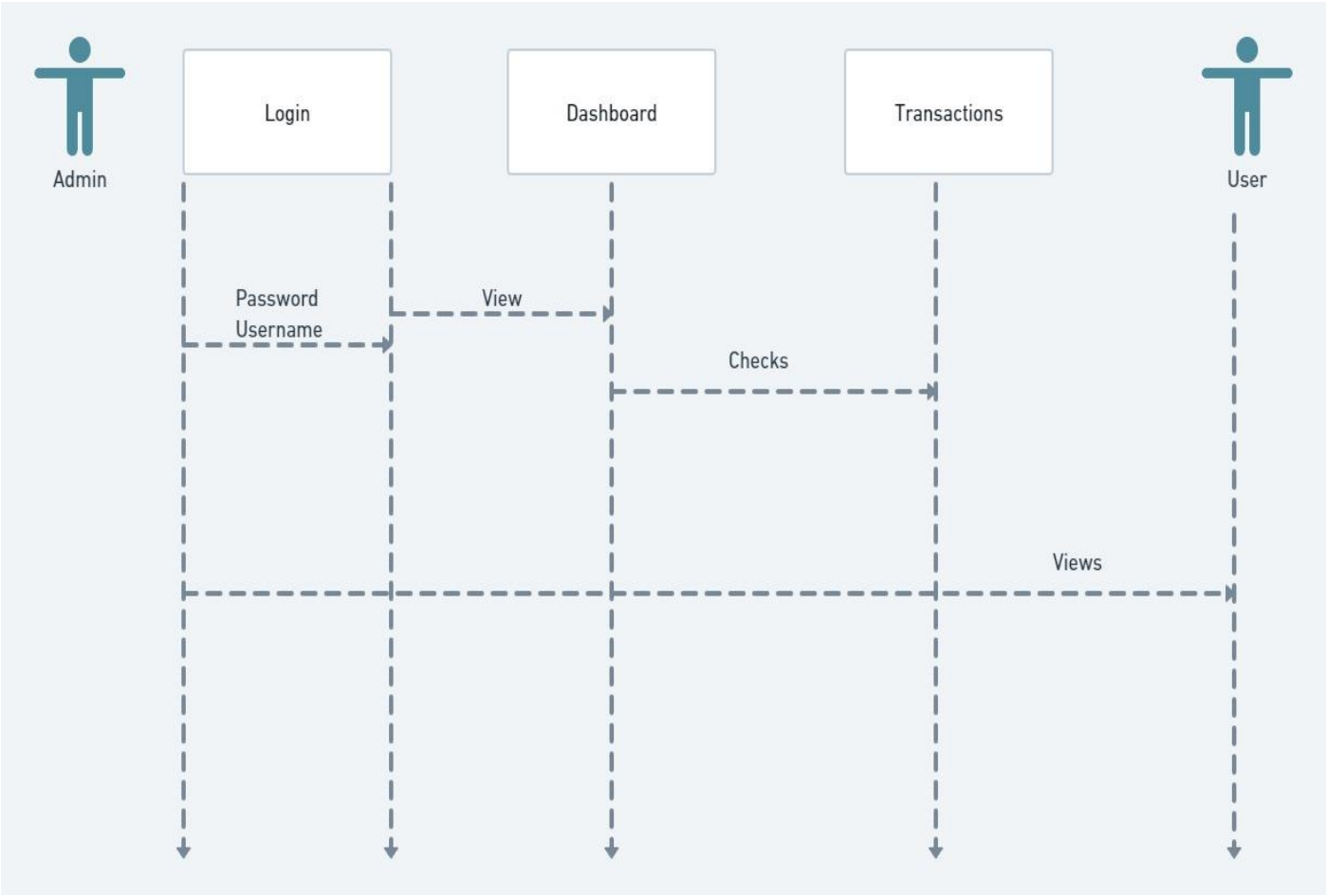


Entity Relationship Diagram: -

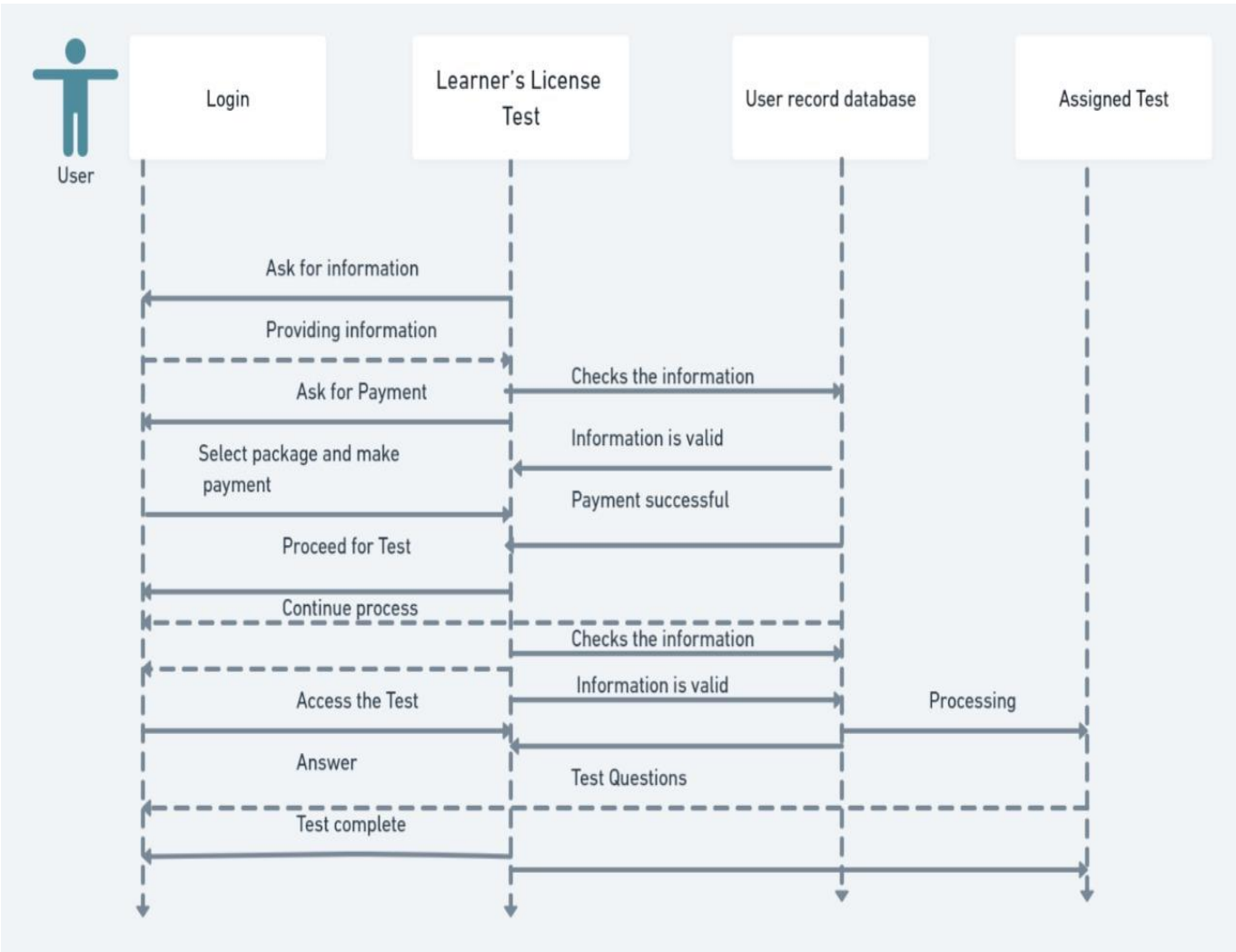


Sequence Diagram:-

1. Sequence diagram for Admin: -



2.Sequence diagram for User: -



System Design

The objective of this project is to manage the details of users, tests and results in a good manner. There are some main modules like user, admin and also some sub modules like registration, login, profile, practice etc. The data required for this project is the collection of information about the tests which are conducted by the different websites like <https://parivahan.gov.in/>. The performance of the application will be fully controlled by the administrator and the administrator can guarantee that anyone has access . The architecture of this project is fully based on the online learner license test which satisfies the specific needs and requirements of a project. A systematic approach is required for the coherent and well running system and this system is the best example of that. Bottom-up and top-down approach is also maintained well in this project, designs are also defined in a graphical language. The project will reduce the manual process in managing examinations and all issues regarding that. Also it will reduce the time and money which is the most important aspect of the online learner license test.

Screen Shots

Home Page

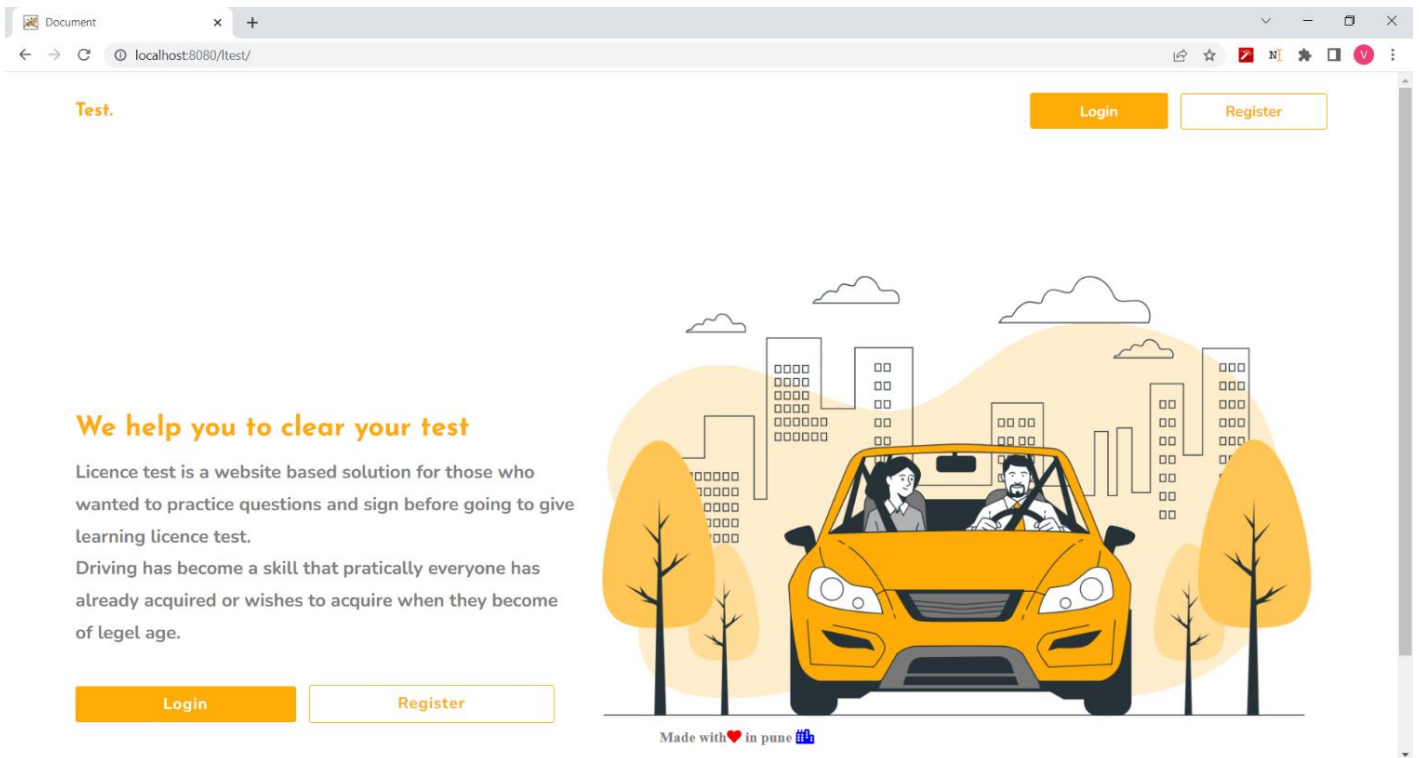
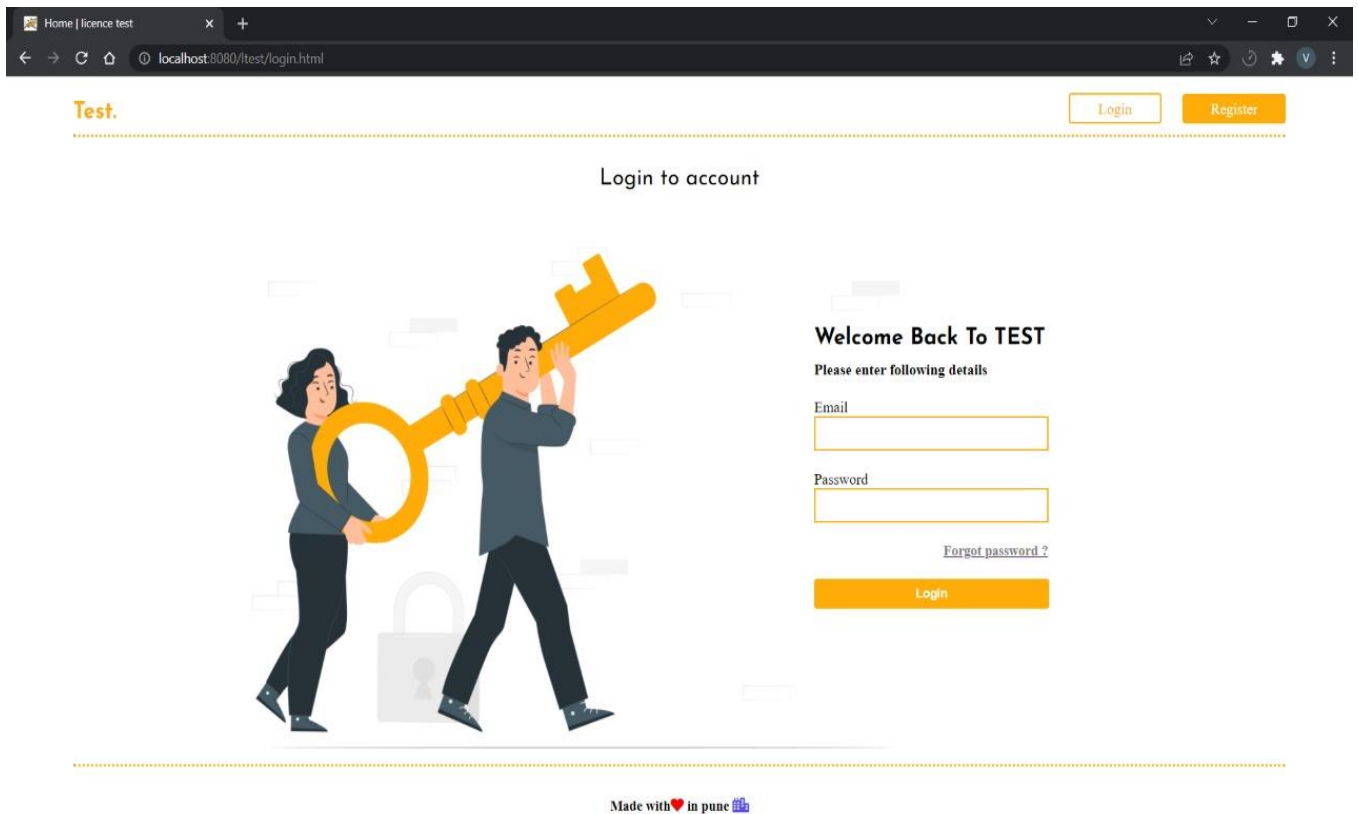


Figure no. 1.1 Home Page

Login Page



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/test/login.html'. The page has a dark header with the text 'Home | licence test' and navigation icons. Below the header, there is a 'Test.' logo on the left and 'Login' and 'Register' buttons on the right. The main content area is titled 'Login to account' and features an illustration of a man and a woman holding a large yellow key, with a padlock icon below them. To the right of the illustration is a login form with the heading 'Welcome Back To TEST', a subheading 'Please enter following details', and input fields for 'Email' and 'Password'. A 'Forgot password ?' link is located below the password field, and a 'Login' button is at the bottom of the form. At the very bottom of the page, there is a footer that says 'Made with ❤ in pune' with a small icon.

Home | licence test

localhost:8080/test/login.html

Test.

Login Register

Login to account

Welcome Back To TEST

Please enter following details

Email

Password

[Forgot password ?](#)

Login

Made with ❤ in pune

Figure no 2.1 Login page

Registration Page

Home | licence test

localhost:8080/test/registration.html

Test.

Login Register

Create An account

Welcome To TEST

Please enter following details

First Name Last Name

Date of birth

dd/mm/yyyy

Email Mobile No

Address

Password Confirm password

Create

Have An Account

Figure no 2.2 Registration page

Forgot Password Page

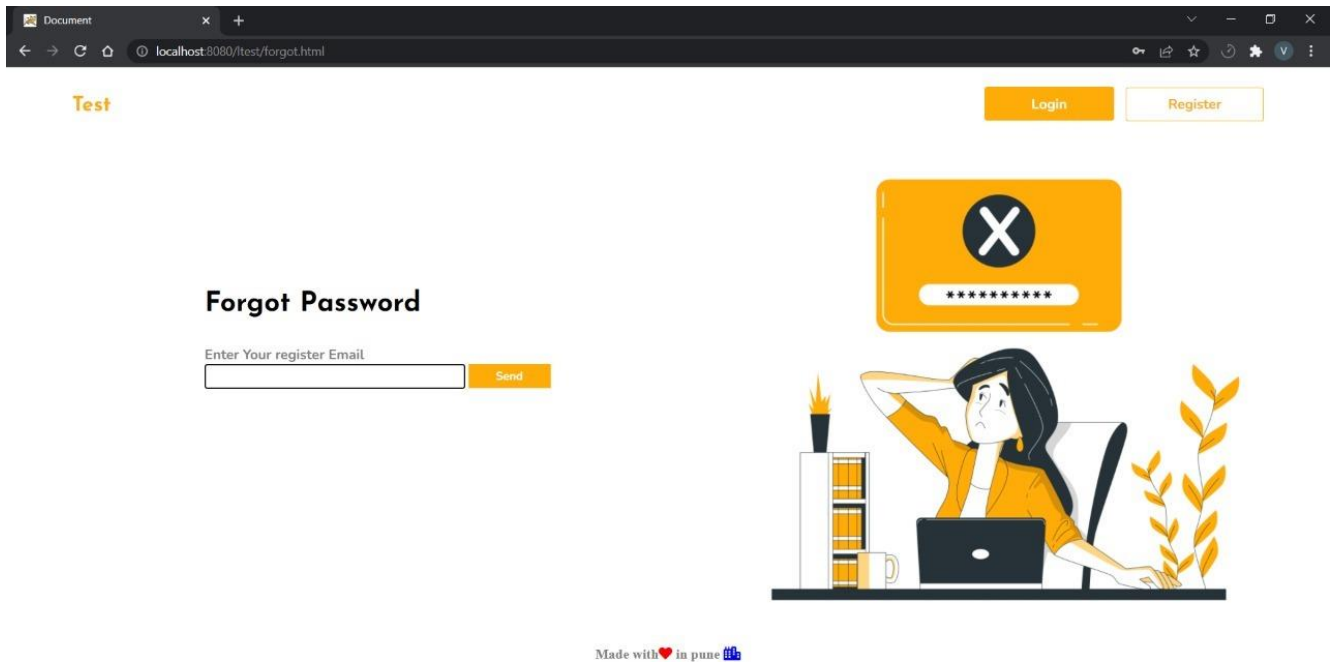


Figure no. 2.3 Forgot Password Page

Price Plan Page

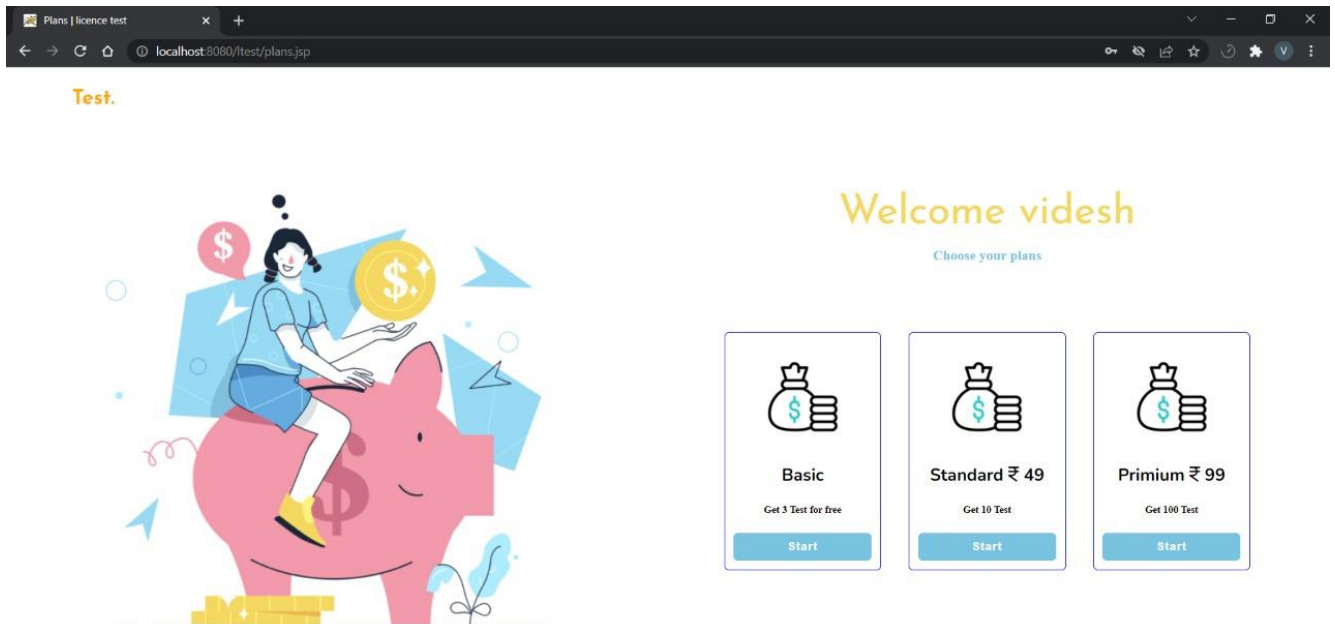


Figure no 2.3 Price Plans page

User Dashboard Page

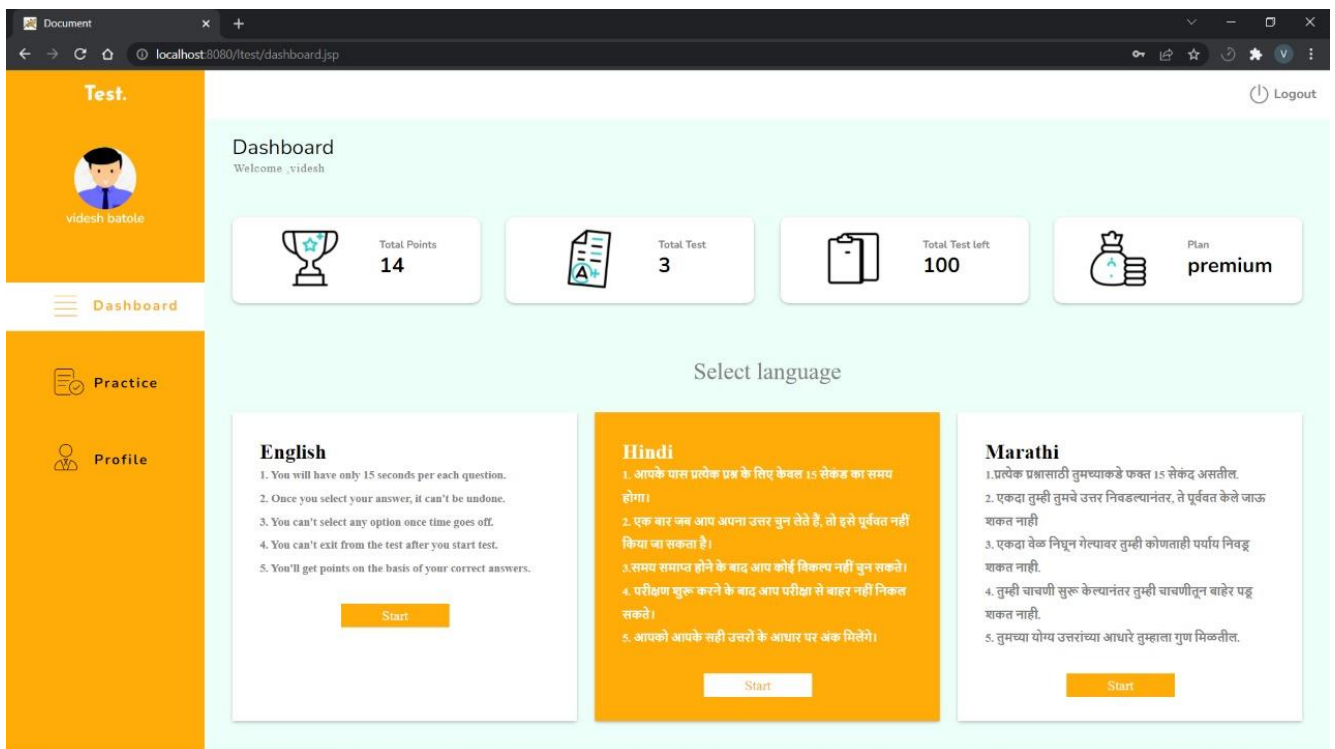


Figure no 3.1 User dashboard

Practice Page

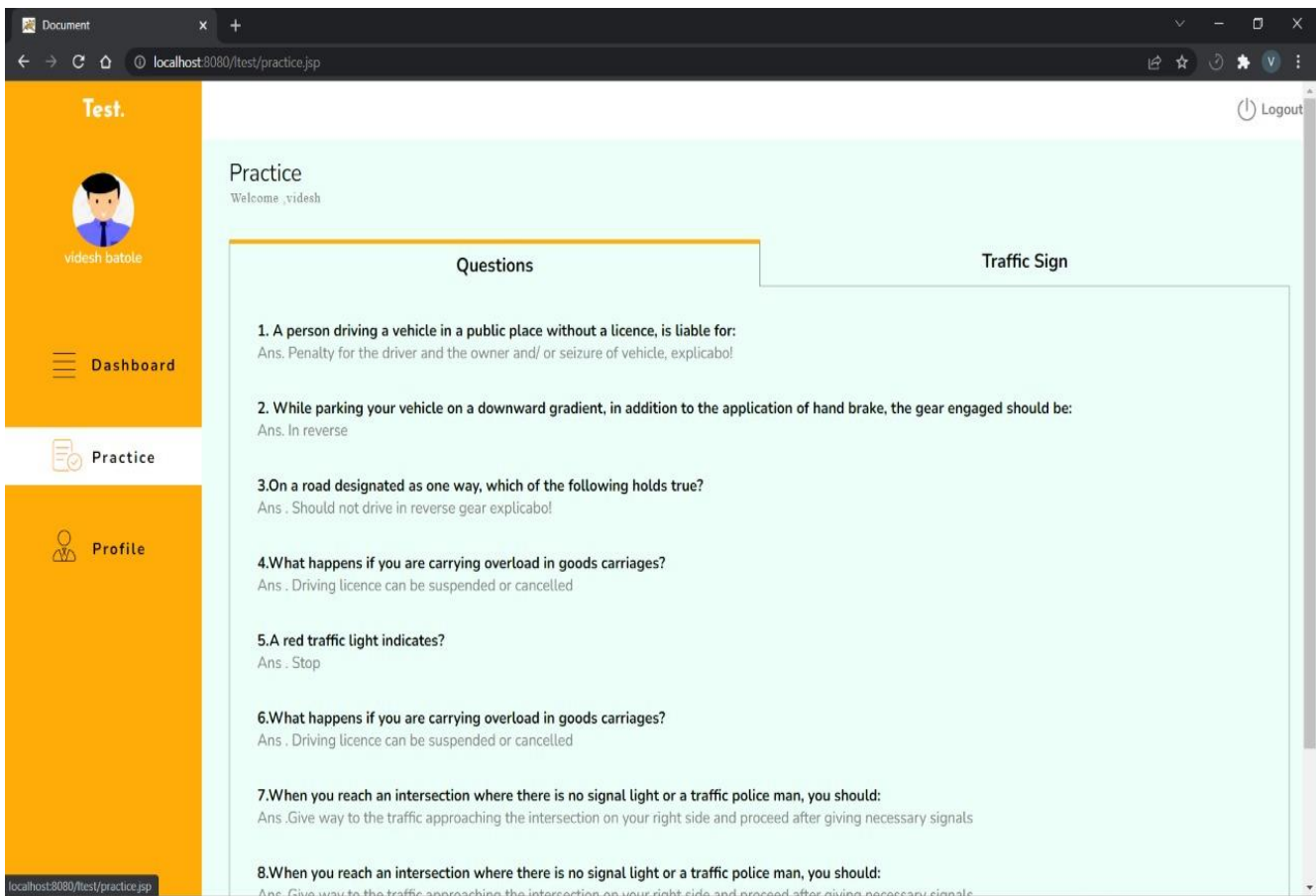


Figure no 3.2 Practice questions page

Practice Signs

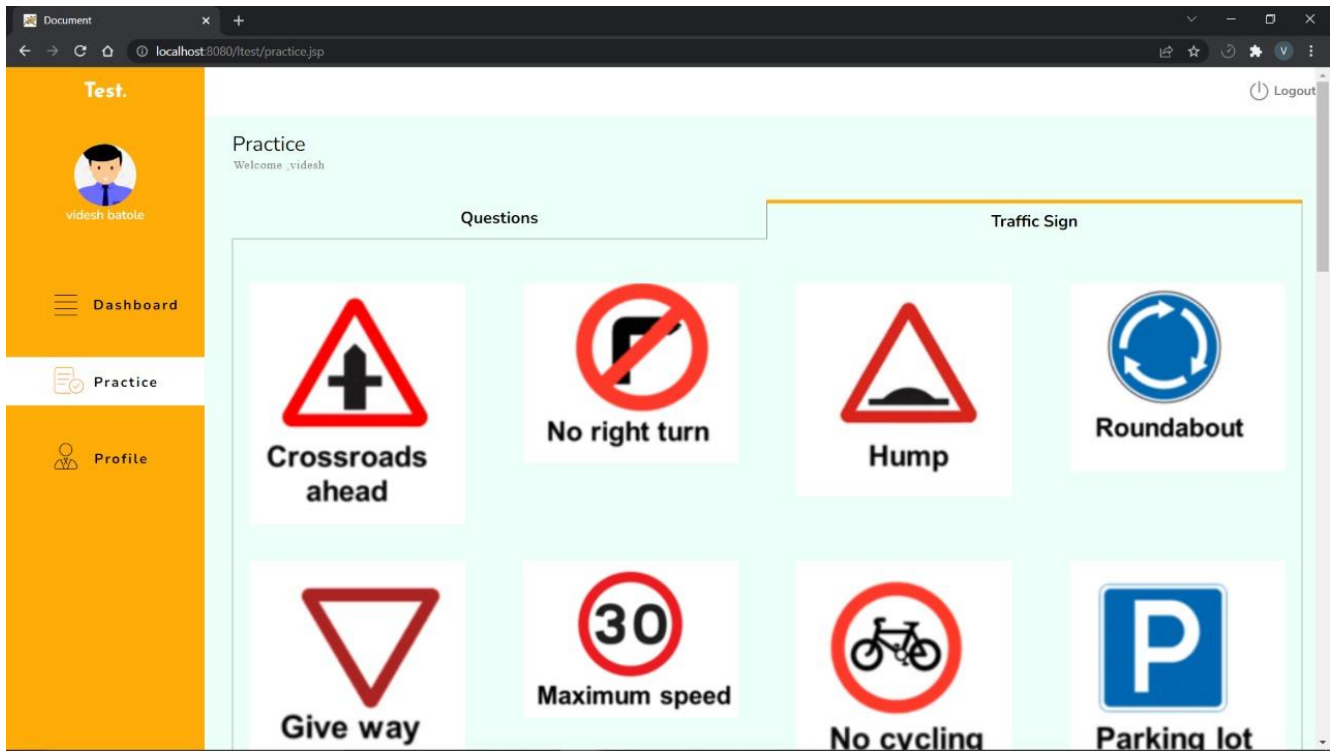


Figure no 3.3 Practice signs page

Profile Page

Document x +

localhost:8080/test/profile.jsp

Test.

Logout

videsh batole

Dashboard

Practice

Profile

Edit Profile

Welcome ,videsh

premium

First Name:

Last Name:

Email:

Mobile No:

Date Of Birth:

Address:

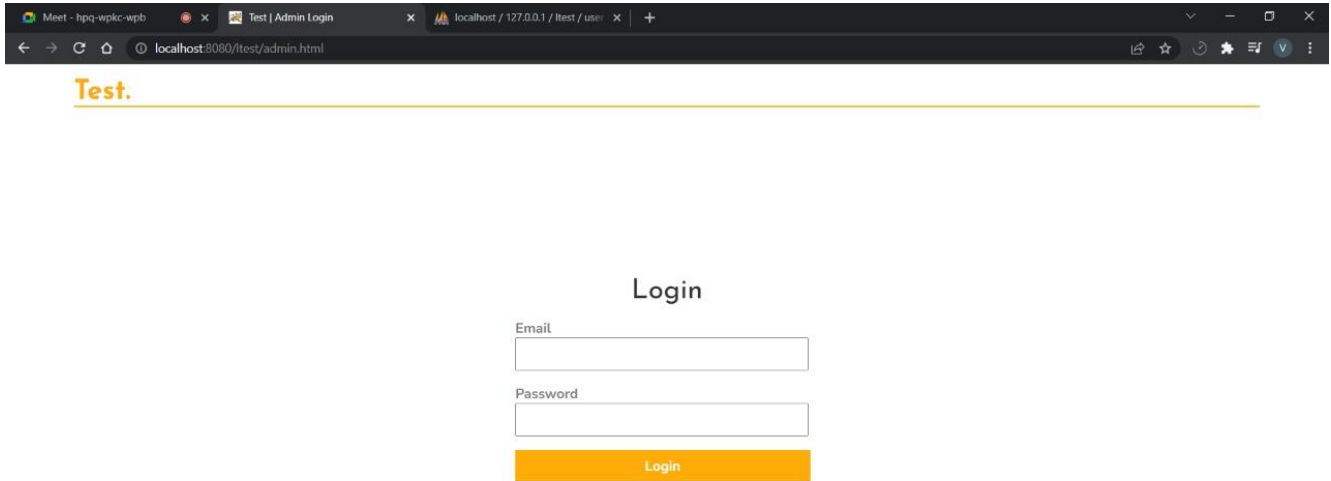
Password:

Save

localhost:8080/test/profile.jsp

Figure no 2.3 Edit profile page

Admin Login Page



The screenshot shows a web browser window with the title 'Test | Admin Login'. The address bar displays 'localhost:8080/test/admin.html'. The page content includes a yellow horizontal line with the word 'Test.' in orange text on the left. Below this, the word 'Login' is centered in a dark gray font. Underneath 'Login' are two input fields: the first is labeled 'Email' and the second is labeled 'Password'. At the bottom of the form is an orange button with the text 'Login' in white.

Test.

Login

Email

Password

Login

Figure no 4.1 Admin Login page

Admin Dashboard Page

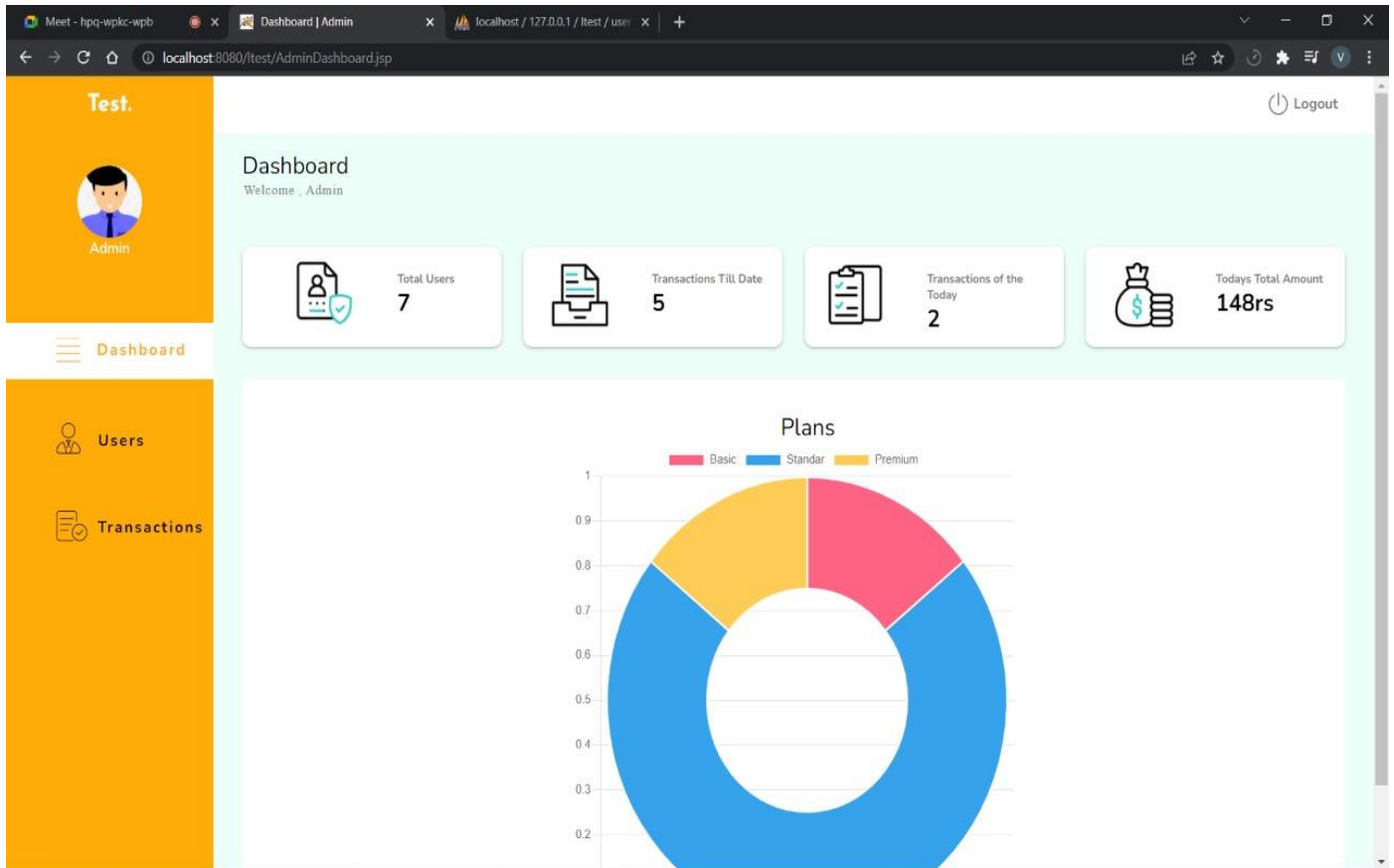


Figure no 4.1 Admin Dashboard page

Users Page:

The screenshot displays a web application interface for managing users. The top header bar is orange and contains the text "Test." on the left and a "Logout" button on the right. Below the header, the main content area is light green. On the left side of the main area, there is a sidebar with an orange background. The sidebar contains a user profile section with a circular avatar of a person with black hair and a blue shirt, labeled "Admin". Below the profile, there are three navigation items: "Dashboard" (with a hamburger menu icon), "Users" (with a group of people icon), and "Transactions" (with a document and checkmark icon). The "Users" section is currently active. The main content area of the "Users" page has a title "Users" and a subtitle "Welcome , Admin". To the right of the title, there is a "Print" button (represented by a printer icon) and a search bar. Below the title and subtitle, there is a table with 7 columns: "User Id", "First Name", "Last Name", "Email Id", "Mobile No", "Address", and "Plan". The table contains 8 rows of user data. The table is styled with an orange header and white body rows. The data is as follows:

User Id	First Name	Last Name	Email Id	Mobile No	Address	Plan
1011	nikita	pawar	nikita8@gmail.com	8356412054	sutarwadi	basic
1012	kishor	jangam	kishor@gmail.com	7030601416	gokhale nagar	standard
1013	sonal	sharma	sonal@gmail.com	8446542681	pune	standard
1014	venktesh	pensalwar	venktesh@gmail.com	1234567891	pune	standard
1015	sonal	sharma	sharmasonal376@gmail.com	1111111111	pune	standard
1031	kishor	batole	videsh@gmail.com	9763739992	pune	premium
1032	videsh	batole	videshbatole1999@gmail.com	7709289203	pashan pune	standard

Figure no 4.2 Users records page

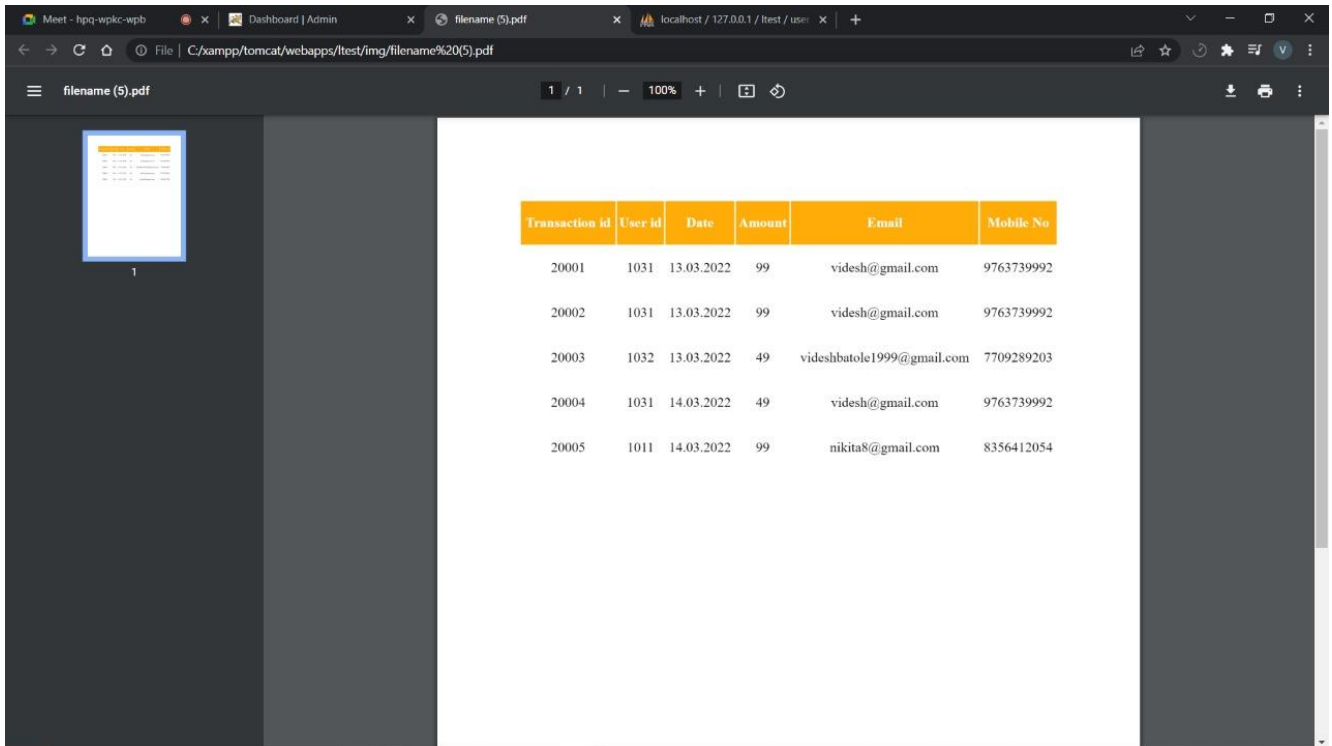
Transactions Page :-

The screenshot displays a web application interface for viewing transaction records. The browser address bar shows the URL `localhost:8080/test/transactionlist.jsp`. The page title is "Transactions" and it includes a "Welcome, Admin" message. A "Logout" button is located in the top right corner. A search bar and a "Print" icon are also present. The main content area features a table with the following data:

Transaction id	User id	Date	Amount	Email	Mobile No
20001	1031	13.03.2022	99	videsh@gmail.com	9763739992
20002	1031	13.03.2022	99	videsh@gmail.com	9763739992
20003	1032	13.03.2022	49	videshbatole1999@gmail.com	7709289203
20004	1031	14.03.2022	49	videsh@gmail.com	9763739992
20005	1011	14.03.2022	99	nikitaS@gmail.com	8356412054

Figure no 4.3 Transaction record page

User Report Page :-

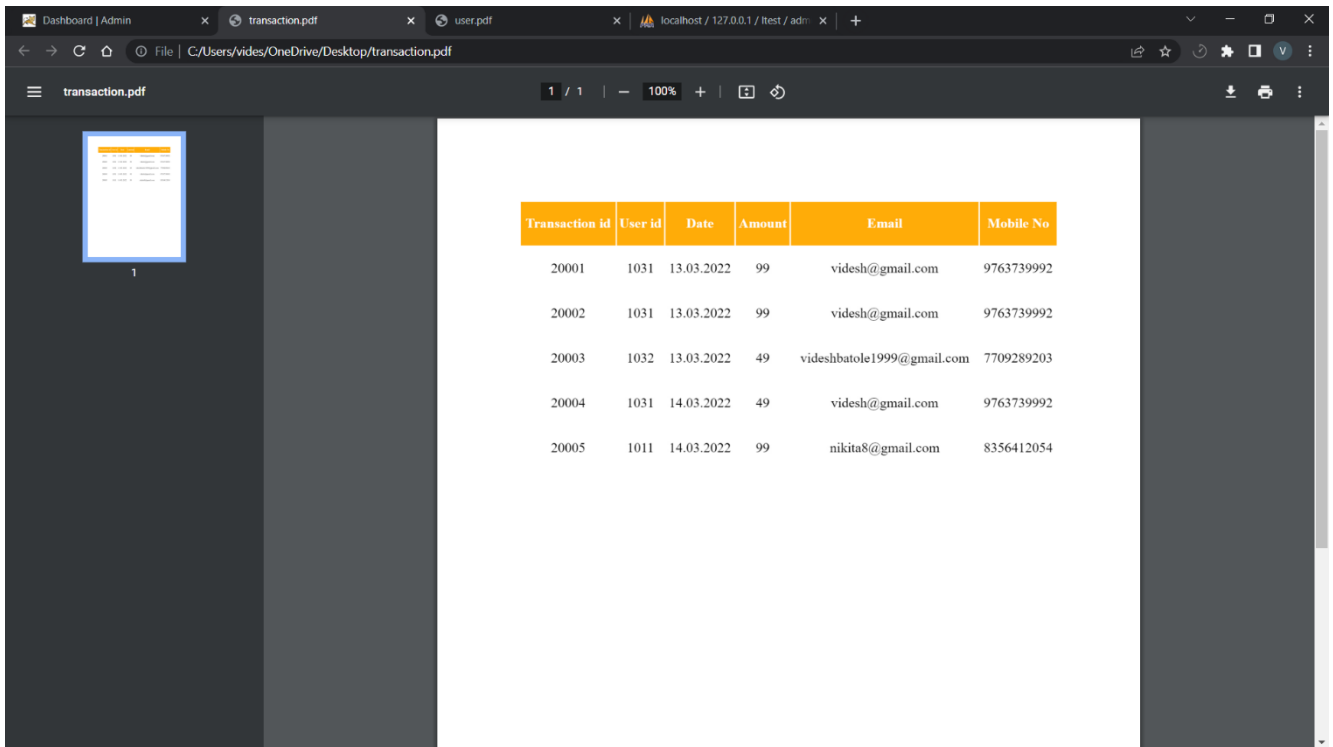


The screenshot shows a web browser window with a PDF viewer. The PDF is titled 'filename (5).pdf' and displays a table of user transactions. The table has 6 columns: Transaction id, User id, Date, Amount, Email, and Mobile No. The data is as follows:

Transaction id	User id	Date	Amount	Email	Mobile No
20001	1031	13.03.2022	99	videsha@gmail.com	9763739992
20002	1031	13.03.2022	99	videsha@gmail.com	9763739992
20003	1032	13.03.2022	49	videsha1999@gmail.com	7709289203
20004	1031	14.03.2022	49	videsha@gmail.com	9763739992
20005	1011	14.03.2022	99	nikita8@gmail.com	8356412054

Figure no 6.1 User record pdf

User Report PDF



The screenshot shows a web browser window with multiple tabs. The active tab is 'transaction.pdf', which is a PDF document. The PDF content is a table with 6 columns: Transaction id, User id, Date, Amount, Email, and Mobile No. The table contains 5 rows of transaction data.

Transaction id	User id	Date	Amount	Email	Mobile No
20001	1031	13.03.2022	99	videsha@gmail.com	9763739992
20002	1031	13.03.2022	99	videsha@gmail.com	9763739992
20003	1032	13.03.2022	49	videshatole1999@gmail.com	7709289203
20004	1031	14.03.2022	49	videsha@gmail.com	9763739992
20005	1011	14.03.2022	99	nikita8@gmail.com	8356412054

Figure no 6.2 User record pdf

Validation Checks

Validation is the process of demonstrating that a system or process meets a defined set of requirements

- **Email :**

Email must contain “@” after that “mail provider” like Gmail , yahoo , mail , personal domain
Then “.” and at the end com , in , org

- **Duplicate email :**

User can not use an email id which is already used by another registered user

- **Mobile no:**

Mobile no must be 10 digits long and does not contain any characters

- **Duplicate mobile :**

User can not use mobile no which is already used by another registered user

- **Form validation :**

To submit form all fields must be required

- **Login Validation:**

Email and password must match database user record

Data Dictionary

User Table

User Table									
S.No	Description	Name	Type	Width	Dec	Null	Reference	Rule	Default
1	User Id	ID	INT	100				Primary Key	
2	First name of User	FIRST NAME	VC	1000		N			
3	Last Name of User	LAST NAME	VC	1000		N			
4	Date of birth of User	DATEOFBIRTH	DATE			N			
5	Email id of User	EMAIL	VC	1000		N			
6	Mobile No. of User	MOBILE NO.	INT	10		N			
7	Address of User	ADDRESS	TEXT			N			
8	User Type	USER TYPE	VC	1000		N			
9	User Password	PASSWORD	TEXT			N			
10	Left Test	LEFT TEST	VC	255		N			
11	Total Point of User	TOTAL POINT	VC	200		N			
12	Total Test of User	TOTAL TEST	VC	200		N			

Admin Table: -

Admin Table									
S.No	Description	Name	Type	Width	Dec	Null	Reference	Rule	Default
1	Username of Admin	EMAIL	VC	250				Primary Key	
2	Password of Admin	PASSWORD	VC	250		N			

Transaction Table

Transaction Table									
S.No	Description	Name	Type	Width	Dec	Null	Reference	Rule	Default
1	Transaction Id of Users	T_ID	INT	250				Primary Key	
2	Amount	AMOUNT	INT	250		N			
3	Date	DATE	DATE			N			
4	User_id	U_ID	INT	250		N			

Implementation and Maintenance

To design and implement this project we plan that the project support to different types of users apart from its administrative part. When project is run for the first time it allowed the user to select as who he/she wants to login in the system. Project support login as user. If a user who is student, try to login using same id and password then the system will not allow him and vice versa. In system there will be test and questions to system and also will be able to observe the result of the user which attempt tests. User who login to system as student will be able to select a particular test and attempt questions depend on this test. After attempting the test and submitting that user will receive a message that you have attempt the test successfully and the points which a user got in a test will be displayed. Also a user which login to system as student will be able to observe the result of test he/she attempt. The “Learner License Test” has been developed to satisfy all proposed requirements. The process is maintained more simply and easily. The system is highly scalable and user friendly. Almost all the system objectives have been met.

The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation. All phases of development were conceived using methodologies. Users can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be Made required with minor modifications.

Test Procedures: -

Testing is a process of executing a program with the intent of finding an error. Testing is a crucial element of software quality assurance and presents ultimate review of specification, design and coding. The main objective of the testing is to find an error and to uncover the errors that are not yet discovered. The increasing visibility of software as a system element and the attendant cost associated with a software failure and motivating forces for well planned, through testing. The purpose of testing is to find faults. Testing is thus a destructive process to some extent. We must find, rather discover that something is incorrect. Testing can only be used to show the presence of errors, but never the absence of errors. It is unwise to test our own code. Developers are unsuited to test their own code. Hence, we must test the code from the experts who are not involved in development, which may be expensive.

Testing Objectives:

1. Testing is a process of executing a program with the intent of finding an error
2. A good test case is one that has a probability of finding an as yet undiscovered error
3. A successful test is one that uncovers an undiscovered error
4. To make sure that the system meets the user requirement during the operations.

In testing process the number of strategies has been used as mentioned below,

Unit Testing.

- Unit Testing
- Integration Testing.
- Validation Testing.
- White Box Testing
- Black Box Testing.
- User acceptance Testing

Unit testing:

One and only one unit is tested in isolation. The unit is typically a class, block or service package.

Unit testing focuses verification efforts on the smallest unit of the software design.

Integration Testing:

Some set of units tested modules are combined together and tested, with the purpose of verifying that they are working together correctly. Integration and unit tests can be performed by the same test cases. Use cases are used as a strong tool for this type of test Blocks, service packages, sub systems and the entire system are tested in this manner. This is helpful to check interfaces between the modules, hence also referred as subsystem testing.

Validation Testing:

At the culmination of the integration testing the software was completely assembled as package, interfaces have been uncovered, and a final series of software validation testing began. Here we test the system function manner that can be reasonably by the customer, the system was tested against system requirement specification.

White-box testing:

White box testing focus on the program control structure. Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.

Block-box testing:

Black box testing is designed to validate functional requirements without regard to the internal workings of a program. Black box testing mainly focuses on the information domain of the software, deriving test cases by partitioning input and output in a manner that provides through test coverage. Incorrect and missing functions, interface errors, errors in data structures, error in functional logic are the errors falling in this category.

User acceptance Testing

User acceptance testing is used to determine the whether the software is fit for the user to use. The System under consideration was listed for user acceptance by keeping constant touch with the prospective user of the system at the time of design, development and making change whenever required.

Future scope of the Mini Project

The future scope of the mini project named “Learning License Test” is mentioned in detail as follows :-

- In this project we are providing a website only in the future we can access and update details through messages also.
- As the system is scalable, more modules can be added as and when required.
- The database that is used in the system can be connected to top-most web servers so that it will be accessed by everyone.
- It can be browser independent so that the site can be opened in any browser.
- The system contents can be modified to accept new attributes for any criterion.
- We can host our website on a server, that every user can practice before giving a learner license.
- This project covered the requirements of the Learner License Test.
- In future, we can add some more features which are in the RTO like issuing learning licenses and after some period of time issuing driving license, organizing collection of vehicle excise duty and selling personalized registrations and much more.

Bibliography

Following websites were helpful to us in building and understanding the concepts. Also, these websites proved to be of great importance during the actual development i.e.

Design & coding of the System

Reference: -

- www.google.com
- www.w3school.com
- www.javatpoint.com
- www.tutorialspoint
- www.mysql.com

Sample Code

Transactionlist.jsp

Program:

```
<% @ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"
import="java.io.*,java.util.*,java.sql.*,org.json.simple.*"%>

<% String email =(String)session.getAttribute("email");

        if (session.getAttribute("email") == null || session.getAttribute("email").equals("")){

            response.sendRedirect("admin.html");

        }

        Class.forName("com.mysql.jdbc.Driver");

        Connection conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/ltest","root","");

        ResultSet data = null ;

        try {

            PreparedStatement transactionData = conn.prepareStatement("SELECT `tid`,`id`,
`date`,`amount`,`email`,`mobileNo` FROM `transaction`,`user` WHERE transaction.uid = user.id");

            data = transactionData.executeQuery();

        } catch (Exception e) {

            out.print(e);

        }

%>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Dashboard | Admin</title>
```

```

<!-- google font cdn links -->

<link rel="preconnect" href="https://fonts.googleapis.com">

<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>

<link
href="https://fonts.googleapis.com/css2?family=Josefin+Sans:wght@100;200;300;400;500;600;700&family=Nunito:wght@200;300;400;500;600;700&display=swap"
rel="stylesheet">

<link rel="preconnect" href="https://fonts.googleapis.com">

<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>

<link href="https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400&display=swap"
rel="stylesheet">

<script src="https://cdnjs.cloudflare.com/ajax/libs/html2pdf.js/0.9.2/html2pdf.bundle.js"></script>

<!-- font awesome fonts link -->

<link rel="stylesheet" href="css/all.css">

<!-- external css file -->

<link rel="stylesheet" href="css/dashboard.css">

<link rel="stylesheet" href="css/admin.css">

</head>

<body>

<div class="dashboard">

<!-- navigation links -->

<nav>

<div class="logo">

<h1>Test.</h1>

</div>

<div class="avatar">



</div>

<h3 class="name">Admin</h3>

<div class="nav-links first-margin">

<ul>

<li>

```

```

        <div class="li"><i class="fa-thin fa-align-justify"> </i>

            <div class="dashboard-logo"><a href="AdminDashboard.jsp" class="practice-
link">Dashboard</a></div>

        </div>

    </li>

    <li class="">

        <div class="li"><i class="fa-thin fa-user-tie"></i>

            <div class="profile"><a href="userslist.jsp" class="practice-link">Users </a></div>

        </div>

    </li>

    <li class="active">

        <div class="li"><i class="fa-thin fa-memo-circle-check"></i>

            <div class="practice"><a href="transactionlist.jsp" class="active-
link">Transactions</a></div>

        </div>

    </li>

</div>

</nav>

<!-- navigation links end here -->

<div class="header">

    <!-- logout button start here -->

    <div class="logout-container">

        <div class="row">

            <a href="jsp/adminlogout.jsp?logout=true">

                <div class="logout-logo-txt">

                    <div class="logo-icon">

                        <i class="fa-light fa-power-off "></i>

                    </div>

                    <div class="logo-text">

                        <h4>Logout</h4>

```



```

        </div>

        </div>

    </a>

</div>

</div>

<!-- logout button end here -->

<h1 class="dashboard-text">Transactions</h1>

<h5 class="welcome">Welcome , Admin</h5>

<div class="list-container">

<div class="search-transaction" >

<div class="search-container">

<div class="print"><i class="fa-thin fa-file-lines" id="print"> <div class="text">Print</div></i>

</div>

<input type="text" class="search-input" id="search"><i class="fa-regular fa-magnifying-
glass"></i>

</div>

</div>

<div id="printdivcontent">

    <table >

    <tr class="table-header" >

        <th>Transaction id </th>

        <th>User id </th>

        <th>Date</th>

        <th >Amount</th>

        <th>Email</th>

        <th >Mobile No</th>

    </tr>

<% int count=1; while(data.next()){ %>

    <tr>

        <%-- <td>&nbsp;<% out.print(count); %>&nbsp;</td> --%>

```

```

        <td><% out.print(data.getString(1)); %></td>
        <td><% out.print(data.getString(2)); %></td>
        <td><% out.print(data.getString(3)); %></td>
        <td><% out.print(data.getString(4)); %></td>
        <td><% out.print(data.getString(5)); %></td>
        <td><% out.print(data.getString(6)); %></td>
    </tr>

    <% count++; } %>
</table>
</div>
</div>
</div>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
<script src="js/transaction.js"></script>
</body>
</html>

```

RegisterUser.jsp

Program:

```

<% @ page import="java.io.*,java.util.*,java.sql.*,org.json.simple.*"% >
<%
    String firstName = request.getParameter("firstName");
    String lastName = request.getParameter("lastName");
    String Email = request.getParameter("email");
    String dob = request.getParameter("dob");
    String mobileNo = request.getParameter("mobileNo");
    String address = request.getParameter("address");
    String password = request.getParameter("password");
    String userType = "New";

```

```

try {

    Class.forName("com.mysql.jdbc.Driver");

    Connection conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/ltest","root","");

    PreparedStatement es = conn.prepareStatement("SELECT email FROM
`user` WHERE email =?");

    es.setString(1,Email);

    ResultSet result_email = es.executeQuery();

    int status_email = result_email.next() ? 1 : 0;

    if(status_email > 0){

        JSONObject email = new JSONObject();

        email.put("status", "Email");

        out.print(email);

    }else{

        PreparedStatement ms = conn.prepareStatement("SELECT mobileNo
FROM `user` WHERE mobileNo =?");

        ms.setString(1,mobileNo);

        ResultSet result_mobile = ms.executeQuery();

        int status_mobile = result_mobile.next() ? 1 : 0;

        if(status_mobile > 0){

            JSONObject mobile = new JSONObject();

            mobile.put("status", "Mobile");

            out.print(mobile);

        }else{

            PreparedStatement reg = conn.prepareStatement("INSERT INTO
user (firstName ,lastName ,dob,email,mobileNo,address,userType,password ,totalPoint,totalTest)
VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?)");

            reg.setString(1,firstName);

            reg.setString(2,lastName);

            reg.setString(3,dob);

```

```
reg.setString(4,Email);
reg.setString(5,mobileNo);
reg.setString(6,address);
reg.setString(7,userType);
reg.setString(8,password);
reg.setString(9,"0");
reg.setString(10,"0");
```

```
int x = reg.executeUpdate();
```

```
if(x> 0){
    JSONObject success = new JSONObject();
```

```
success.put("status", "Success");
```

```
out.print(success);
```

```
conn.close();
```

```
}else{
```

```
    out.println("field");
```

```
}
```

```
}
```

```
}
```

```
} catch ( Exception e) {
```

```
out.println(e);
```

```
}
```

```
%>
```